AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (currently amended): A method of acquisition of satellite data by a mobile device including a radio navigation satellite system (RNSS) receiver, said method comprising:

receiving a signal transmitted by a plurality of satellites and corresponding to a sum of signals each transmitted by a satellite and each modulated by a spread spectrum signal characteristic of said satellite;

generating a plurality of local duplicates each of which is the duplicate of a spread spectrum signal characteristic of a satellite;

correcting a frequency of each of said local duplicates by compensating a Doppler effect of each of said satellites using assistance data sent by an assistance server to said mobile device;

summing the corrected duplicates; ~~and~~

determining a correlation function as a function of time between the sum of the corrected duplicates and said satellite data signal; and

identifying each of the satellites associated with each of correlation peaks revealed by said correlation function,

wherein, after the at least one satellite has been identified, each remaining satellite is identified, using assistance data sent to said mobile device from an assistance server, said assistance data including ephemerides of said plurality of satellites and an identifier of a cell in which said mobile device is located, by determining a propagation time difference of a signal

between the at least one satellite already identified and said mobile device, on the one hand, and

each of the remaining satellites to be identified and said mobile device, on the other hand.

2. (canceled)

3. (currently amended): A method according to ~~claim 2~~ claim 1, wherein in the

identifying the each of the satellites, identifying at least one of the satellites comprises:

identifying a synchronization time associated with a correlation peak;

determining a plurality of correlations calculated for said synchronization time between

each of the sum of the corrected duplicates and said satellite data signal; and

identifying the at least one of the satellites associated with said correlation peak as a

function of said correlations.

4. (previously presented): A method according to claim 3, wherein said peak is a highest

peak among the correlation peaks of said correlation function as a function of time, and the

highest peak is first identified among the correlation peaks.

5. (canceled)

6. (currently amended): A method according to ~~claim 2~~ claim 1, wherein the identifying

each of the satellites comprises:

identifying a synchronization time associated with a correlation peak;

determining a plurality of correlations calculated for said synchronization time between each of the sum of the corrected duplicates and said satellite data signal; and

identifying a satellite associated with said correlation peak as a function of said correlations.

7. (previously presented): A method according to claim 1, wherein said correlation function as a function of time is determined by operations of:

determining a Fourier transform of each of said corrected duplicates;

summing the Fourier transform of each of said corrected duplicates;

determining a Fourier transform of said satellite signal;

multiplying the sum of the Fourier transform of the each of said corrected duplicates by the Fourier transform of said satellite signal; and

determining an inverse Fourier transform of a result of the multiplying .

8. (previously presented): A radio navigation satellite system (RNSS) receiver for implementing the method according to claim 1, said receiver being adapted to receive a signal transmitted by a plurality of satellites and corresponding to a sum of signals each transmitted by a satellite and each modulated by a spread spectrum signal characteristic of said satellite, and said receiver comprising:

means for generating a plurality of local duplicates each of which is the duplicate of a spread spectrum signal characteristic of a satellite;

4

means for correcting a frequency of each of said local duplicates by compensating a

Doppler effect of each of said satellites using assistance data sent by an assistance server to said

receiver;

an adder adapted to sum the corrected duplicates; and

means for calculating a correlation function as a function of time between the sum of the

corrected duplicates and said satellite data signal.

9. (previously presented): A mobile device incorporating a radio navigation satellite

system (RNSS) receiver according to claim 8.